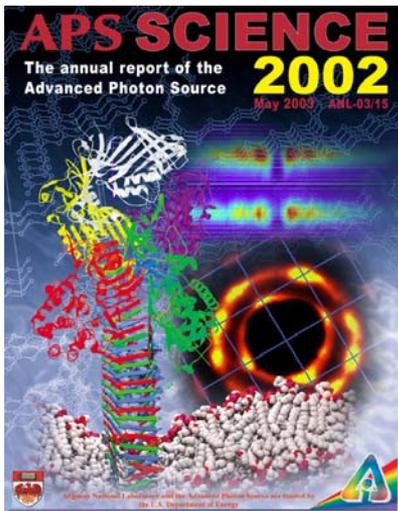


APS/User Monthly Meeting



Introduction
Murray Gibson
July 30, 2003

Program

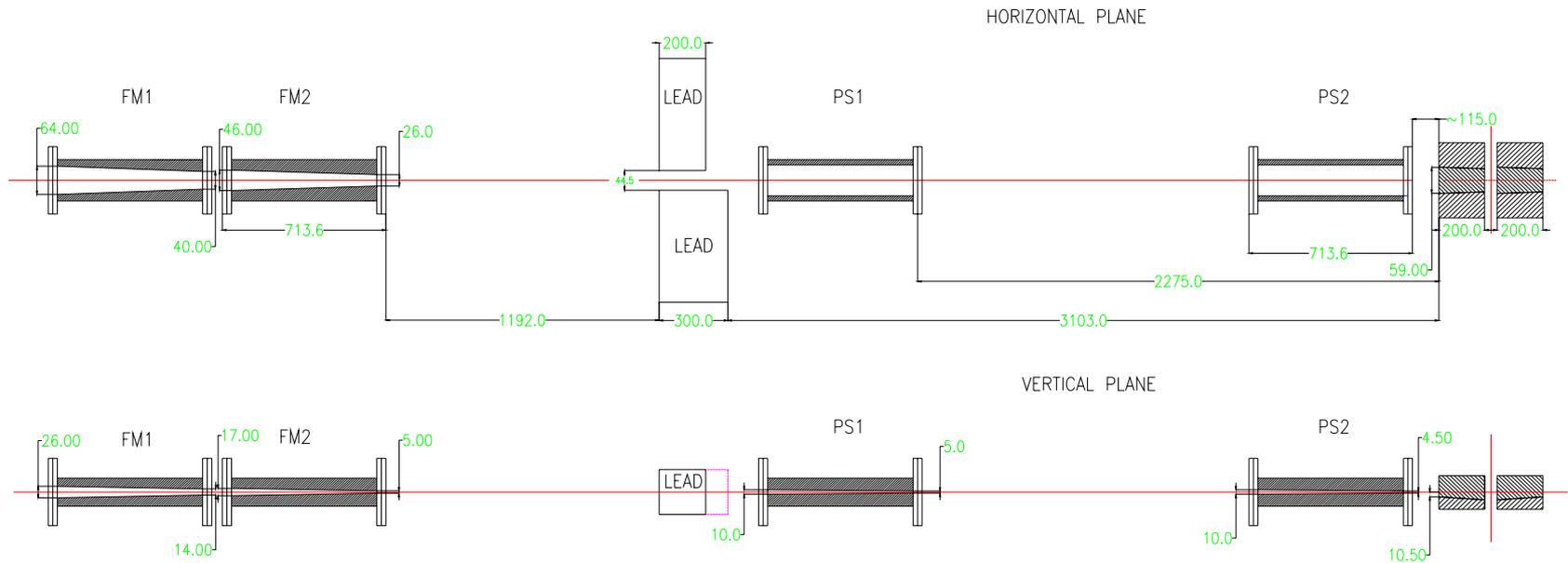
- Introduction - Murray Gibson
- APSUO Meeting Highlights - Mark Rivers
- Partner User Council Highlights -
Jim Viccaro
- Stability and New Operations Modes -
Glenn Decker

23-ID Canted Undulator Front End Safety Shutters

- History:
 - Front end redesigned, constructed and installed on Sector 23-ID this year (May 2003)
 - Design review was carried out in 2002
 - Valid, recent concerns expressed about new safety-shutter design – further review in progress
 - 23-ID shutter not yet operational - locks in place, safety shutter undergoes further design review

23-ID Canted Undulator Front End

NOTE: SCALE IN THE VERTICAL DIRECTION IS 1:1, SCALE IN THE HORIZONTAL DIRECTION IS 1:2



DOUBLE CANTED UNDULATOR ID FRONT END – FIXED MASKS, LEAD SHIELD, PHOTON SHUTTERS AND SAFETY SHUTTER LOCATION

- Our initial calculations show that the current design is completely safe for credible scenarios
 - But departure from our past design principle of “no line of sight” (labyrinth) for additional redundant protection
- *We will not change our design principles without careful consideration and full external review*
- Exposed procedural problem – must have **independent** safety review of all critical components, including front ends

Actions

- Will modify canted undulator shutter design to remove “line-of-sight”
 - modifications and complete front-end design will undergo a full safety/design review before implementation
- APS “Conduct of Operations” in future will include front-end and beamline critical components
 - AOD DD sign-off on all changes in interim

Additionally...

- Will use existing shutter under administrative control for shielding validation of FOE and test of CU beams
- Aim to validate and install modified design in time to avoid schedule impact
- External review of FE *design principles* will be planned for future
 - based on operations experience, anticipating higher current operation
 - can examine issues such as labyrinth designs at that time, if we choose to propose a change

OSHA visit a success

- OSHA team visited ANL/APS in early July
 - Congressional mandate to evaluate cost of OSHA oversight
- Observed only ~22 deficiencies at APS (c.f. 1000 total at ANL)
 - Most corrected immediately
 - e.g. fire extinguisher placement
- Were impressed by general housekeeping and attitude of employees and users
- Congratulations and thanks!

XOR Organization

X-ray Operations and Research Associate Division Director (open)

Sr. Engineer
S.T.A.
Student

D. Shu
C. Preissner (5)
Y. Han

High Resolution X-ray Scattering (Sector 3)--E. Alp

A. Alatas (2)
J. Burke
A. Said (2)
H. Sinn
W. Sturhahn
T. Toellner
J. Zhao
S.Zygmuntowicz

Time-resolved Techniques--J. Wang

B. Adams
D. Arms (**Sector 7**)
S. Cheong (**Sector 1**)
R. Guico (2) (**Sector 1**)
X. Li
J. Liu (**Sector 1**)
S. Narayanan (**Sector 8**)
A. Sandy (**Sector 8**)
L. Shoudis
D. Walko (**Sector 7**)

X-ray Physics (Sector 1)--D. Haefner

K. Abu Saleem
J. Almer
D. Ferguson
K. Fezzaa
P. Lee
W. Lee
U. Lienert
A. Mashayekhi
D. Mashayekhi
R. Ranay
S. Shastri
R. Smither
N. Yang (2)
P. Zambianchi
Y. Zhang

Polarization Studies (Sector 4)--G. Srajer

A. Cady
D. Carbaugh
Y. Choi (2)
J. Freeland
B. Gagnon
D. Haskel
Z. Islam
G. Kavich
D. Keavney
J. Lang
D. Lee
M. Lehmuller(9)
M. McDowell
M. Pape (**Sector 20**)
R. Rosenberg
P. Ryan
T. Smith (**Sector 20**)

BESSRC (Sector 11, 12)--M. Beno

K. Attenkofer
T. Bolin
D. Casa (**Sector 9**)
J. Cowan
M. Engbretson
T. Gog (**Sector 9**)
G. Jennings
C. Kurtz
I. Kuzmenko
J. Linton
S. Seifert

X-ray Microscopy (Sector 2)--I. McNulty

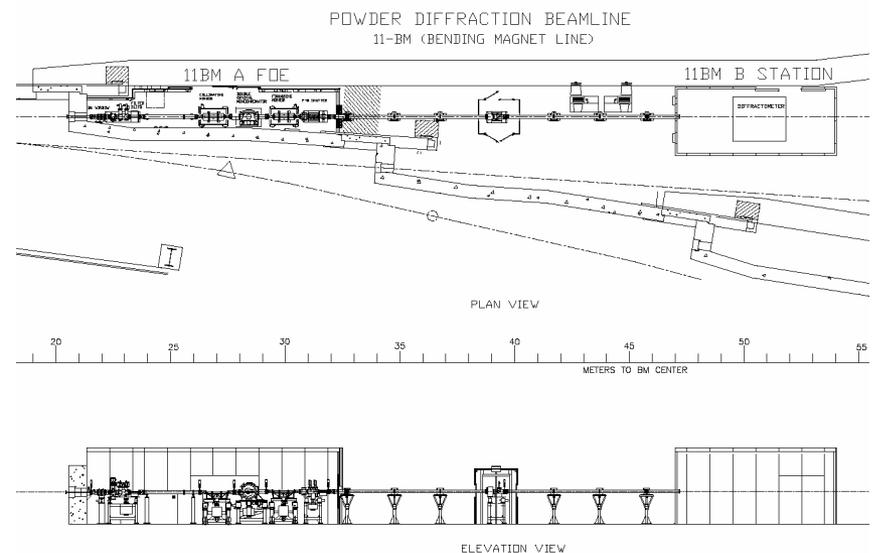
J. Arko
Z. Cai
Y. Chu
F. DeCarlo
P. Ilinski
B. Lai
D. Legnini
J. Maser (NanoCAT)
B. Meurer
I. Moric
D. Paterson
C. Roehrig
A. Tkachuk
S. Vogt
R. Winarski (**NanoCAT**)
E. Wrobel
Y. Xiao

Upcoming University of Chicago Review

- Tentatively scheduled for Sept. 17-19, 2003
- Will review entire APS
- Committee names not formally released yet
- Expect to review how APS functions and balances priorities, with less focus on overall impact of research (complementary to DOE peer review expected in late 2004)

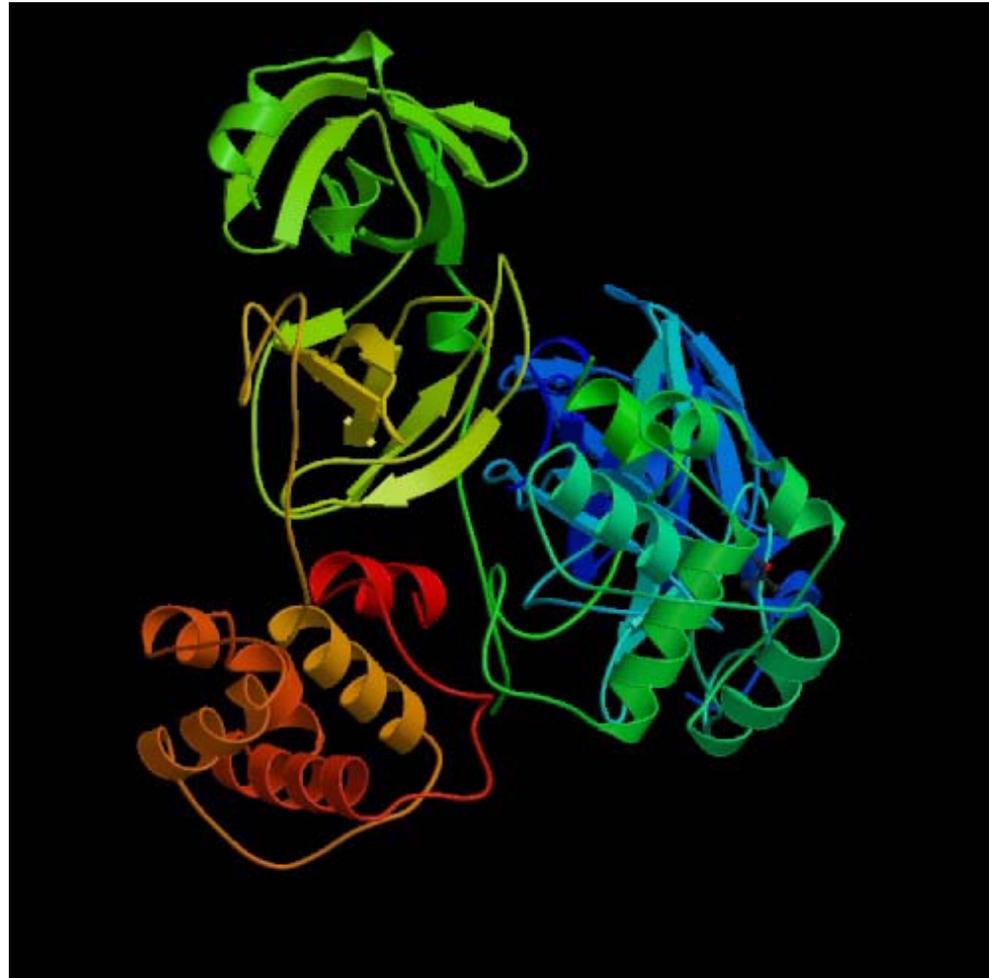
Bending Magnet Powder Diffraction Beamline for Sector 11 BM

- PIs John Mitchell, Jim Jorgensen (MSD/IPNS), Bob VonDreele, Peter Lee (APS)
- Will operate as general user beamline
- Capital from BES, Commissioning and Operations from APS



Funded by BES Neutron and
X-Ray Instrumentation
Competitive Program

Crystal Structure of SARS Coronavirus Protease Determined by SGX-CAT at APS

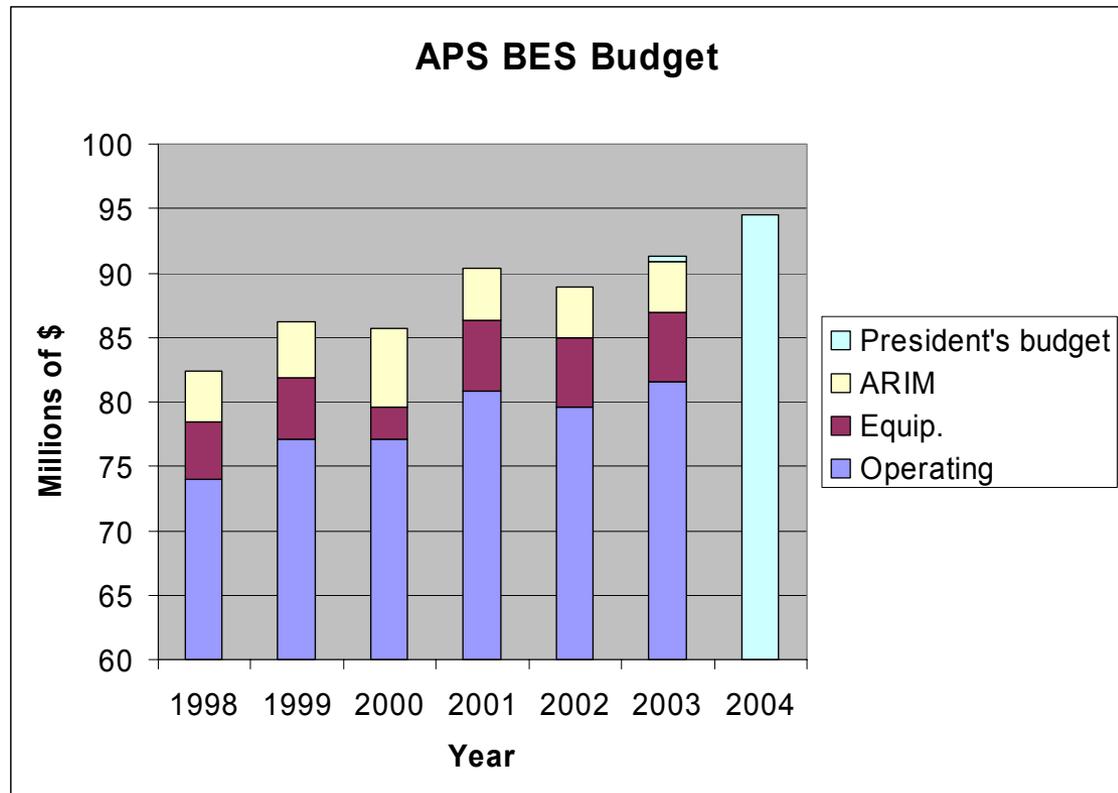


Budget Update

- FY 2003 Final Budget for APS

*Final APS budget
for FY 2003
is \$90.89M
c.f. original 2003
PB of \$91.3M*

*Additional \$1M support
from ANL for BES
CAT operation*



Congressional Action on FY'04

- President's budget for FY'04 has APS at \$94.5M (+ 3.609M, + 4%)
- House voted 7/18 at President's budget level +\$8M in BES for facilities operations (+2.76% ~ \$2.6M for APS)
 - User advocacy invaluable
- Senate committee report (7/17) at President's budget level for BES